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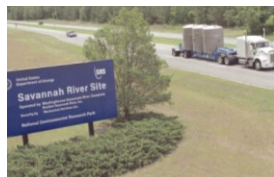
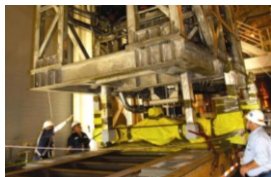
Integrated Engineering, Construction, and Management Solutions

Energy & Environment



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Summary of GAP Analysis For SRS Facilities
Compared to the TRU Standard 5506



November 6, 2007



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Facilities Evaluated and Scope of Activities

Solid Waste Management Facility (SWMF)

- **Full Scope of TRU Handling and Processing Activities**
- **DSA Upgrade awaiting DOE approval**

TRU Drum Remediation in F-Canyon

- **TRU Drum Remediation in Two Locations Within the F-Canyon Facility**
- **Work Authorized by a JCO.**
- **SAR Addendum being prepared prepared to replace JCO**

Large Steel (Black) Box (LSB) Repackaging in H-Canyon

- **Repackaging of LSB's into WIPP Compliant Standard Waste Boxes**
- **(SWB) in H-Canyon Truck Well**
- **Work Authorized by SAR Addendum to H-Canyon SAR and Revision to H-Canyon TSR's**
- **Limited Number of LSB's**



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SWMF TRU Operations Gap Analysis Results

KEY DOE-STD-5506 CRITERIA	COMPARISON RESULTS
Minimum Set of Accidents	Consistent with DOE-STD-5506
Source Term Factors	<p><u>Gaps</u></p> <ul style="list-style-type: none">.MAR for single container event did not account for additional 20% margin.Less conservative single container fire ARFxRF.Conservative pool fire and container deflagration Damage Ratio (DR)xARFxRFs.Less conservative DR for catastrophic impacts <p>Gap analysis shows sufficient margin in overall source term calculation such that no change in consequence or control set would occur if used DOE-STD-5506 methodology.</p>
Consequence Modeling ⁽¹⁾ Assumptions	Consistent with DOE-STD-5506
Risk Binning Guidelines	Consistent with DOE-STD-5506
Safety Controls for Risk Class I and II Events	Consistent with DOE-STD-5506

(1) Differences in surface roughness values are based on site-specific considerations and are not considered gaps



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F-Canyon TRU Operations Gap Analysis Results

KEY DOE-STD-5506 CRITERIA	COMPARISON RESULTS
Minimum Set of Accidents	Consistent with DOE-STD-5506
Source Term Factors	<u>Gaps</u> MAR for single container events did not account for additional 20% margin Less conservative release fractions for fire and explosion scenarios were used
Consequence Modeling Assumptions	<u>Gaps</u> ⁽¹⁾ . 50 th rather than 95 th percentile meteorology used for 100m (onsite) doses A revision to the JCO was completed to increase the allowable PEC and to implement interim guidance including use of 95 th percentile meteorology for 100m (onsite) doses . SAR addendum to replace JCO under development.
Risk Binning Guidelines	Consistent with DOE-STD-5506
Safety Controls for Risk Class I and II Events	Consistent with DOE-STD-5506

(1) Differences in surface roughness value is based on site-specific considerations and is not considered a gap



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H-Canyon TRU Operations Gap Analysis Results

KEY DOE-STD-5506 CRITERIA	COMPARISON RESULTS
Minimum Set of Accidents	Consistent with DOE-STD-5506
Source Term Factors	<u>Gaps</u> - MAR for single container events did not account for additional 20% margin
Consequence Modeling Assumptions	<u>Gaps</u> ⁽¹⁾ - 50 th rather than 95 th percentile meteorology used for 100m (onsite) doses Gap Analysis shows that no change in control set would occur if used STD-5506 methodology, primarily because the existing H-Canyon safety basis already identifies the H-Canyon ventilation system as a credited control.
Risk Binning Guidelines	Consistent with DOE-STD-5506
Safety Controls for Risk Class I and II Events	Consistent with DOE-STD-5506

(1) Differences in surface roughness value is based on site-specific considerations and is not considered a gap



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Recommendations

SWMF – No change in DSA Upgrade and supporting analyses recommended to come into complete compliance with STD-5506. DSA Upgrade already submitted and awaiting DOE approval sufficiently conservative to address 3 specific non-conservatisms, but not overly conservative such that unnecessary controls resulted.

F-Canyon –A revision to the JCO was completed to increase the allowable PEC and to implement interim guidance including use of 95th percentile meteorology for 100m (onsite) doses . SAR Addendum to replace JCO under development.

H-Canyon – No prompt upgrade warranted since areas of non-conservatism are adequately addressed by credited H-Canyon Ventilation System. Existing effort to upgrade H-Canyon safety basis will comply with STD-5506 for TRU waste activities which will continue.